

AVIATION

The Oldest American Aeronautical Magazine

JUNE 22, 1925

Issued Weekly

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XVIII

SPECIAL FEATURES

NUMBER
25

HOW TO BUILD A GLIDER
AIRCRAFT AND THE HAWAIIAN MANEUVERS
GUGGENHEIM ENDOWS N.Y.U. AERO COURSE

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JUNE 22, 1925

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Published every Monday

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In this age of rapid scientific development, the line between luxuries and necessities is so finely drawn, that anything which tends towards progress and advancement is soon adopted as necessary, even sooner than the old adage would have it.

In the humble field of aeroplane propeller construction, the above holds true, and the metal propeller in the remarkably short period of four years has become a real necessity. Certainly no manufacturer can afford to turn out any commercial machines without careful consideration of this wonderful new invention, and even commercial operators should give it serious thought because of added safety, durability, increased performance and pay load.

Mr. Leslie L. Irving of the Irving Aircraft Company, Buffalo, N. Y., writes:

"Having flown my Swallow for about twenty-five hours with a new Curtiss-Reed metal propeller, I would like to say that I am entirely pleased with the results. I believe that it has increased the climb at least 20% and greatly helped on the take-off."

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Guggenheim School of Aeronautics

MR. DANIEL GUGGENHEIM'S gift of \$500,000 with which New York University will found a school of aeronautics sends a vision of the future and a generosity of purpose which is an inspiration to all those concerned with aviation. The gift came almost without solicitation. Mr. Guggenheim's son was an aviator during the war and is still actively interested. He was on the committee which was trying to raise an endowment for the chair of aeronautics and suggested his father as to the methods of doing it. As soon as Mr. Guggenheim was made of the project he realized its importance and after a thorough study of the plan he decided to give the whole amount needed himself. Mr. Guggenheim's business career testifies to his ability and foresight; his vision of the future of the air and his insatiable enthusiasm of the future influence of proper technical training should bring new courage to us all.

The trial and error method of many of the early pioneers is gradually being replaced by truly scientific methods. We are accumulating a wealth of fact about aerodynamics and the art of flight. If we are to keep pace with the other nations, this knowledge must be imparted to the younger generation and this is one of the main purposes of the new School of Aeronautics. Europe long ago recognized that and equally so Germany gave rise to a large number of engineering schools which give courses in aeronautics. The equipment with which the new school will be supplied should make it a center for those who wish to conduct original research work. Mr. Guggenheim could not have made a more constructive gift, it is hoped that others will follow his example.

Increased Interest in Technical Aeronautics

AERONAUTICS is thought by many to be confined to a group of engineers. These enthusiasts have frequently been regarded by their friends and associates as wasting their time. The outstanding achievements of the Air Mail Service and the formation of the National Air Transport, Inc., have convinced some of the doubters that they are falling to keep abreast of the times. Air professions are now coming to see that they will have close connection with or interest in commercial air transportation. Various technical societies are holding successful meetings. The time has come when other industries feel that they should have accurate information. The two latest meetings are the New York Electrical Society and The Traffic Club of New York.

Aeronautical engineering has the same basis as all other kinds of engineering. Presently all the materials used in the construction of aircraft are used in other industries. Many of the accessories and instruments for aircraft are manufactured, at the present time, at a scale loss by firms who supply the other branches of engineering. Technicians are dependent very largely on their professional societies for information

on new developments. The larger the number of meetings of these societies that are devoted to aeronautics, the greater the expenditure with and consequent benefit to commercial air transportation.

Feeder Lines

ALMOST everybody interested in aviation has at one time or another planned or been connected with the opening of an air transport line. For various reasons, some of the airlines that far operated have worked out successfully, but throughout the country there are still thousands of men who hope some day to be at the head of an aerial transportation line. The actual formation of National Air Transport, Inc., and of the Ford Air Line will stimulate this hope, but to the men who have worked in aviation for years and have tried to start airlines themselves, the announcement that these powerful companies have entered the field will come almost as a frustration of their own personal ambitions. It will be almost impossible for men who have tried to start airlines of their own, and failed, not to take a dig at the stronger airlines toward those who have been successful.

This mental attitude will not advance the cause of commercial aviation, and as the long run it will not help the men who laid it. It must be realized that the terrible loss happened. Air transportation along the main arteries of traffic could never have been started by companies inadequately financed and with antiquated equipment.

The United States covers a large area and it is inevitable that the most obvious routes will be controlled by great corporations. But there will always remain plenty of routes where smaller companies can operate with good chances of success.

Aviation air mail routes of two or three hundred miles have not been patronized, as there was not enough saving over the train line. With the establishment of the night Air Mail Service the conditions change. There are many routes within a few hundred miles of the New York San Francisco air line whose normal mail tonnage cannot exceed with the night Air Mail and that will be found to establish an audience for their mail or else lose a business day in sending and receiving mail from the larger cities. The rates of postage for these short feeder lines will have to be worked out on a different basis from the long haul routes. There is a provision in the Kelly bill for carriers of air mail to receive five-fifths of the ordinary first class postage rate. Obviously four-fifths of all the revenue from first class mail on a two hundred and fifty mile run is a greater percentage than the special air postage franchise on a thousand mile run. The air transport companies which handle the truck air lines will welcome the business developed by feeder lines and the experience and pioneer work of the large companies, which have the capital to experiment with, will work to the ultimate profit of the smaller companies.

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UNITED STATES AIR FORCES

U. S. ARMY AIR SERVICE

Chaotic Field

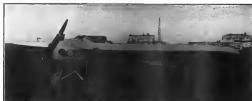
On June 8, Flight Lead H. G. B. McKee, of Van Dusen, of the Northland Air Force, a student in the First Air Service Technical School, safely accomplished a four parachute jump from the cockpit of an airplane, landed 1,000 ft. from the cockpit, and then jumped to the ground from the cockpit of an airplane, voluntarily using a parachute. He weighs 220 lb., 5 ft. 7 in. in height and thirty years of age. He is attending the Air Service Technical School for the purpose of determining the efficiency of the U. S. Army Air Service parachute and the demonstration of June 8 thoroughly satisfied him on its merits.


It might be stated at this time that several tests made by British and Canadian forces at this school were so satisfactory that the Royal Air Force of England and Canada have adopted this parachute. The Air Service Technical School on May 10 held a parachute demonstration in which 17 jumps were made without injury from heights of 2,000 to 7,000 ft. and had three parachutes were used. As fast as a jumper landed his chute was hauled to the longer and as prepared for the next subject.

Fairfield A. I. D.

The ships of the Fairfield Air Intermediate Depot are now close down. The following production was reported for the month of April: Airplane—4 P-10, 1 P-11, 1 P-12, 1 P-13, 1 P-14, 1 P-15, 1 P-16, 1 P-17, 1 P-18, 1 P-19, 1 P-20, 1 P-21, 1 P-22, 1 P-23, 1 P-24, 1 P-25, 1 P-26, 1 P-27, 1 P-28, 1 P-29, 1 P-30, 1 P-31, 1 P-32, 1 P-33, 1 P-34, 1 P-35, 1 P-36, 1 P-37, 1 P-38, 1 P-39, 1 P-40, 1 P-41, 1 P-42, 1 P-43, 1 P-44, 1 P-45, 1 P-46, 1 P-47, 1 P-48, 1 P-49, 1 P-50, 1 P-51, 1 P-52, 1 P-53, 1 P-54, 1 P-55, 1 P-56, 1 P-57, 1 P-58, 1 P-59, 1 P-60, 1 P-61, 1 P-62, 1 P-63, 1 P-64, 1 P-65, 1 P-66, 1 P-67, 1 P-68, 1 P-69, 1 P-70, 1 P-71, 1 P-72, 1 P-73, 1 P-74, 1 P-75, 1 P-76, 1 P-77, 1 P-78, 1 P-79, 1 P-80, 1 P-81, 1 P-82, 1 P-83, 1 P-84, 1 P-85, 1 P-86, 1 P-87, 1 P-88, 1 P-89, 1 P-90, 1 P-91, 1 P-92, 1 P-93, 1 P-94, 1 P-95, 1 P-96, 1 P-97, 1 P-98, 1 P-99, 1 P-100, 1 P-101, 1 P-102, 1 P-103, 1 P-104, 1 P-105, 1 P-106, 1 P-107, 1 P-108, 1 P-109, 1 P-110, 1 P-111, 1 P-112, 1 P-113, 1 P-114, 1 P-115, 1 P-116, 1 P-117, 1 P-118, 1 P-119, 1 P-120, 1 P-121, 1 P-122, 1 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